



TOXIC SHOCK SYNDROME

What is toxic shock syndrome?

Streptococcal toxic shock syndrome (STSS) is a rare but serious bacterial infection. Bacteria called group A *Streptococcus* or group A strep can cause STSS when they spread into deep tissues and the bloodstream. STSS can cause severe damage and illness.

Who gets toxic shock syndrome?

Anyone can get STSS, but some factors increase the risk of getting this infection:

- Age: STSS is most common in adults 65 years old or older.
- Breaks in the skin: People with an open wound, including those who recently had surgery or a viral infection that causes open sores (like chickenpox), are at increased risk for STSS.
- Chronic illnesses: People with diabetes or alcohol use disorder (previously known as alcohol dependence or alcoholism) are at increased risk for STSS.
- Women that misuse or use of vaginal foreign body items such as diaphragms, tampons, and sponges for a prolonged period of time. Women with a history of recent childbirth, miscarriage, or abortion are also at increased risk.

How is toxic shock syndrome spread?

It is very easy for infected people to spread group A strep, which can turn into STSS. However, person-to-person transmission of STSS is very rare. Experts do not know how the bacteria get into the body for nearly half of people with STSS. Sometimes the bacteria get into the body through openings in the skin, like an injury or surgical wound. The bacteria can also get into the body through mucous membranes in the nose and throat.

What are the symptoms of toxic shock syndrome?

STSS often begins with fever and chills, muscle aches, nausea, and vomiting. After the first symptoms start, it usually only takes about 24 to 48 hours for low blood pressure to develop. Once this happens, STSS quickly gets much more serious with these symptoms:

- Low blood pressure (hypotension)
- Faster than normal heart rate (tachycardia)
- Rapid breathing (tachypnea)
- Other signs that organs are not working (organ failure). Examples are when someone with kidney failure may not make urine; and when someone with liver failure may bleed or bruise a lot or their skin and eyes may turn yellow.

Office of Infectious Disease Epidemiology
24/7 Emergency Contact Number: 1-888-295-5156

Revised: 01/2023

Page 1 of 2



Frequently Asked Questions

How soon do symptoms appear?

The incubation period for STSS varies depending on where the bacteria entered the body. Once initial symptoms occur, low blood pressure (hypotension) generally develops within 24 to 48 hours. TSS can quickly progress to a serious life-threatening disease. If a mild illness quickly becomes severe with whole body symptoms, medical attention is recommended.

Should an infected person be excluded from work or school?

Because it is uncommon for someone to spread STSS to other people, exclusions are not necessary. Contact the Office of Infectious Disease Epidemiology at the number at the bottom of the page for further questions or guidance.

What is the treatment for toxic shock syndrome?

Antibiotic therapy is critical, and removal of the source of infection is important in the management of STSS. Hospitalization is required for supportive therapy to treat shock and organ failure.

What can a person or community do to prevent the spread of toxic shock syndrome?

- Menstruating women should avoid using tampons if they have had TSS.
- Prompt and thorough wound care and burns. Get medical advice if you notice signs of infection such as swelling, redness, and increasing pain.
- Minimal and proper use of vaginal foreign objects such as diaphragms, tampons, and sponges can help prevent TSS. In addition:
 - Wash hands before and after inserting a tampon.
 - Change tampons regularly.
 - Never have more than one tampon in your vagina at a time.

Resources

Centers for Disease Control and Prevention,
<https://www.cdc.gov/groupastrep/diseases-public/streptococcal-toxic-shock-syndrome.html>

Johns Hopkins Medicine,
<https://www.hopkinsmedicine.org/health/conditions-and-diseases/toxic-shock-syndrome-tss>

Office of Infectious Disease Epidemiology
24/7 Emergency Contact Number: 1-888-295-5156

Revised: 01/2023
Page 2 of 2